

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (withdrawn) An isolated polypeptide selected from the group consisting of:
 - a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,
 - b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1,
 - c) a biologically active fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, and
 - d) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

2-10. (canceled)

11 (currently amended) An isolated antibody that ~~specifically~~ binds to a polypeptide comprising the an amino acid sequence of SEQ ID NO:1, wherein the antibody specifically binds to an epitope within the amino acid sequence of SEQ ID NO:1.

12. (withdrawn) An isolated polynucleotide selected from the group consisting of:
 - a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,
 - b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 90% identical to the polynucleotide sequence of SEQ ID NO:2,
 - c) a polynucleotide complementary to a polynucleotide of a),
 - d) a polynucleotide complementary to a polynucleotide of b), and
 - e) an RNA equivalent of a)-d).

13-29. (canceled)

30. (withdrawn) A diagnostic test for a condition or disease associated with the expression of NAPTR in a biological sample, the method comprising:

- a) combining the biological sample with an antibody of claim 11, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex, and
- b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

31. (previously presented) The antibody of claim 11, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment,
- d) a F(ab')₂ fragment, or
- e) a humanized antibody.

32. (previously presented) A composition comprising an antibody of claim 11 and an acceptable excipient.

33. (withdrawn) A method of diagnosing a condition or disease associated with the expression of NAPTR in a subject, comprising administering to said subject an effective amount of the composition of claim 32.

34. (previously presented) A composition of claim 32, wherein the antibody is labeled.

35. (withdrawn) A method of diagnosing a condition or disease associated with the expression of NAPTR in a subject, comprising administering to said subject an effective amount of the composition of claim 34.

36. (withdrawn) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 11, the method comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibodies from said animal, and
- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:1.

37. (previously presented) A polyclonal antibody produced by a method comprising:

- (a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1;
- (b) isolating an antibody from the animal; and
- (c) screening the isolated antibody for specific binding to an amino acid sequence of SEQ ID NO:1.

38. (previously presented) A composition comprising the polyclonal antibody of claim 37 and a suitable carrier.

39. (withdrawn) A method of making a monoclonal antibody with the specificity of the antibody of claim 11, the method comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibody producing cells from the animal,
- c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells,
- d) culturing the hybridoma cells, and

- e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:1.
40. (currently amended) A monoclonal antibody produced by a method comprising:
- (a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1;[.]
 - (b) isolating an antibody producing cell from the animal;
 - (c) fusing the isolated cell with an immortalized cell to form a hybridoma cell;
 - (d) culturing the hybridoma cell; and
 - (e) isolating from the hybridoma cell culture a monoclonal antibody that specifically binds to a polypeptide comprising an amino acid sequence of SEQ ID NO:1, wherein the antibody specifically binds to an epitope within the amino acid sequence of SEQ ID NO:1.
41. (previously presented) A composition comprising the monoclonal antibody of claim 40 and a suitable carrier.
42. (previously presented) The antibody of claim 11, wherein the antibody is produced by screening a Fab expression library.
43. (previously presented) The antibody of claim 11, wherein the antibody is produced by screening a recombinant immunoglobulin library.
44. (withdrawn) A method of detecting polypeptide having the amino acid sequence of SEQ ID NO:1 in a sample, the method comprising:
- a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
 - b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having the amino acid sequence of SEQ ID NO:1 in the sample.

45. (withdrawn): A method of purifying a polypeptide having the amino acid sequence of SEQ ID No:1 from a sample, the method comprising:

- a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) separating the antibody from the sample and obtaining the purified polypeptide having the amino acid sequence of SEQ ID NO:1.

46-55. (canceled)

56. (withdrawn) A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:1.

57. (canceled)

58. (previously presented) The antibody of claim 11, wherein the antibody inhibits the transport of phosphate molecules by a polypeptide comprising the amino acid sequence of SEQ ID NO: 1.

59. (previously presented) The antibody of claim 11, wherein the polypeptide consists of the amino acid sequence of SEQ ID NO: 1.

60. (previously presented) The composition of claim 32, wherein the polypeptide consists of the amino acid sequence of SEQ ID NO: 1.